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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,778	03/08/2001	Francois Rey	11343.030001	6588

22511 7590 02/21/2007
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EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/786,778

Applicant(s)

REY ET AL.

Examiner

Usha Raman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10-17, 23-26, 28-30, 36, 37 and 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-17, 23-26, 28-30, 36, 37 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3-8-07</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of group 1 in the reply filed on November 1st, 2006 is acknowledged.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 29, 36-37, and 46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 29, 36-37 and 46 are directed to the data structure of an application data table and its components. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-2, 4, 10-15, 17, 23-26, 29, 36, and 37 are rejected under 35

U.S.C. 102(a) as being anticipated by DVB Document A038, "Specification for Service Information (SI) in Digital Video Broadcasting (DVB) Systems" published in March 1998.

With regards to claims 1, 14, 26 and 29, the A038 document discloses a method of transmitting an application data, in a plurality of services in a digital transport stream, wherein a service comprises at least one application (audio, video, data components, see fig. 1 on page 6.), providing an application data table (BAT sub table, wherein each sub table identifies a list of services for the bouquet *bouquet_id*) containing information regarding at least one application carried by each of the plurality of services within the transport stream (see pages 6, 8 and 15).

With further regards to claims 14 and 26, since the SI data is transmitted in a digital television, it is inherent that there is a transmission apparatus for transmit the SI data (see page 10).

With regards to claims 2, and 15 the service list descriptor is transport packet having a predetermined packet ID (0x0011) value associated with the presence of the application data table within the packet (see pages 11 and 15).

With regards to claims 4, 17, each service further comprises a program map table (PMT) giving access to all applications carried by this service, the

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program map table itself comprising information regarding at least one application carried by this service. See page 8.

With regards to claims 10, 23, and 36, the method further comprises the steps of providing a plurality of the application data tables (i.e. plurality of BAT sub tables), each application data table (BAT sub table) containing information regarding applications contained within a bouquet of services (each BAT sub table identifies a list of services for bouquet *bouquet_id*, see pages 6, 8, and 15).

With regards to claims 11, 24, and 37, each application data table (BAT sub table) is transported in one of a table and a section within a transport packet, each application data table being associated with one of a table and section having one of a characteristic table ID (0x4A) and a characteristic table ID extension value (*bouquet_id*). See pages 15-17.

With regards to claim 12, the SI data are received in a digital television system. See page 4.

With regards to claims 13, and 25 the digital transport stream conforms to the MPEG standard. See page 10.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 3, 16, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over DVB Document A038, "Specification for Service Information (SI) in Digital Video Broadcasting (DVB) Systems" published in March 1998.

With regards to claims 3, 16, and 30, the A038 document is silent on the step of electronically signing the application data table so as to permit a decoder to verify an application data table as originating from a known operator. Examiner takes official notice that it was well known at the time of the invention to add additional security measurements to ensure that a received data is received from legitimate source. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method to provide authentication means with the service information tables so that the receiver can authenticate the data prior to downloading it.

With regards to claim 28, the A038 document discloses an IRD to demultiplex and decode the various SI streams and therefore comprises means for controlling the downloading and maintenance of applications in dependence on the information contained within the application data table (e.g. version updates). While the document does not disclose the step of storing the application data table in a memory, examiner takes Official Notice that it was well known in the art at the time of the invention to store SI data in the memory of a IRD. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the IRD to include a memory that

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stores the SI data, in order to inform the viewer of service information and to enable the viewer to tune to a requested service.

Conclusion

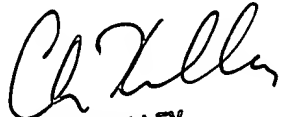
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akins (US Pat. 6,526,508) discloses the step of authenticating received information to verify that the data is received from the intended provider.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR



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